

# Rehabilitation Science Dissertation Defense



**Mohammed Alqahtani**  
Candidate for PhD in  
Rehabilitation Science  
Final Dissertation Defense

## **Behavioral, Environmental, Social, Psychosocial, and Physiological Factors that Impact the Relationship between Chronic Lung Disease Status and Susceptibility to Electronic Cigarette Use or Actual Electronic Cigarette Use**

There is surge increase in e-cigarettes among adult vulnerable population such as individuals with chronic lung disease (CLD). Currently, there is a lack of understanding of the factors that may lead to the increase use of e-cigarettes or susceptibility of e-cigarette use among individuals who have a history of CLD. In the first paper, we sought to assess the association between CLD, and e-cigarette use and to decide whether binge drinking moderates this relationship. E-cigarette use appears to be more common among adults with self-reported CLD. We also found that binge drinking was positively associated with e-cigarette use, however, more numerous binge drinking episodes undermined the link between CLD and e-cigarette use. In the second paper, we assessed whether mental health condition explains the association between CLD and e-cigarette use, and whether the association between CLD and e-cigarette use is conditional on the presence or absence of respiratory symptoms. The association between CLD and e-cigarette use may be due, in part, to poorer mental health among individuals with CLD. Our analyses did not indicate a statistically significant interaction between chronic lung disease and respiratory symptoms in the likelihood of e-cigarette use. In the third paper, we looked at the association between clinical diagnosis CLD status and the susceptibility of e-cigarette and, to see if behavioral or environmental factors influence this relationship. We found out that the susceptibility to using e-cigarettes was higher among adults without CLD than those with. Warning label, receiving discounts or coupons, drinking was associated with an increased likelihood of susceptibility to using e-cigarettes independent of CLD status. However, our analyses did not indicate a statistically significant interaction between CLD and any of the environmental or behavioral factors in the susceptibility of using e-cigarette use. Our Findings may help improve interventions or strategies to reduce adjustable predictors of increased e-cigarette use. Such approaches would contribute to better pulmonary disease management, decreased e-cigarette use, and provide a better quality of life for both non-chronic/chronic lung disease populations.

**UAB** SCHOOL OF  
HEALTH PROFESSIONS  
The University of Alabama at Birmingham

### EVENT DETAILS

Free to UAB  
students, faculty and  
clinicians.

### DATE/TIME

Friday, June 17, 2022

11am-12pm

### LOCATION

**LRC 215/219 and**  
**[https://](https://us02web.zoom.us/j/83810262114?pwd=VGtRTTdYUTlXUHdIL29NQnUyRExrQT09)**  
**[us02web.zoom.us/](https://us02web.zoom.us/j/83810262114?pwd=VGtRTTdYUTlXUHdIL29NQnUyRExrQT09)**  
**[j/83810262114?](https://us02web.zoom.us/j/83810262114?pwd=VGtRTTdYUTlXUHdIL29NQnUyRExrQT09)**  
**[pwd=VGtRTTdYUTlXU](https://us02web.zoom.us/j/83810262114?pwd=VGtRTTdYUTlXUHdIL29NQnUyRExrQT09)**  
**[HdIL29NQnUyRExrQT](https://us02web.zoom.us/j/83810262114?pwd=VGtRTTdYUTlXUHdIL29NQnUyRExrQT09)**  
**09**

### CONTACT

For more information  
contact: Dr. William  
Thompson  
205-975-2788  
[wrthomps@uab.edu](mailto:wrthomps@uab.edu)